OF ATTORNEY FO	OR UTILI	TY Fi	Y First Named Inventor Cherchi								
OR DESIG	GN			(	COMPLETE	E IF KNOWN					
PATENT APPLI	CATION	A	pplication	n Serial Number	Not yet a	ssigned					
Declaration		Fi	ling Date	;	Herewith	ith					
Submitted with		G	roup Art	Unit	Not yet a	yet assigned					
Initial Filing		E	xaminer 1	Vame	Not yet a	ssigned	ssigned				
				- · · · · · · · · · · · · · · · · · · ·							
As a below named inventor, I l	hereby declar	e that:									
My residence, mailing address, a	and citizenshi	p are as state	d below	next to my name.							
I believe I am the original, first											
names are listed below) of the st								٦			
AN INTEGRAT	ED OPTIC PO			IVERTER BASE	D ON STR	UCTURAL CHI	RALITY 				
(Title of the Invention) the specification of which											
was filed on	as PCT International Application Number PCT/US2003/034577										
any amendment specifically refe I acknowledge the duty to disclo patentability as defined in 37 CI	I hereby state that I have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above.  I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known by me to be material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information known by me which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-										
I hereby claim foreign priority b certificate(s), or 365(a) of any P America, listed below and have certificate(s), or of any PCT inte	CT internationalso identified	nal application I below, by o	on which checking	designated at lea	st one countign applicati	try other than the	United States of inventor's				
Prior Foreign Application Number(s)		Country		Foreign Filin (MM/DD/Y		Priority Not Claimed	Certified Cop Attached? YES No				
Additional foreign app				•			<u> </u>				
I hereby claim the benefit under  Application Serial Num				ates provisional a		) listed below.	<del></del>				
60/422,414	DCI (3)	<u>F</u>		0/30/2002		1					
60/478,751	·		0	6/16/2003							

Attorney Docket No.

MIT-170

> DECLARATION AND POWER

Declaration and Power of Attorney for Utility or Design Patent Application Serial No. Not yet assigned
Atty. Docket No. MIT-170
Page 2 of 3

Declaration and Power of At	torney for Utility or Desig	gn Patent Application
I hereby claim the benefit under 35 U.S.C. 120 of any United United States of America, listed below and, insofar as the s States or PCT International application in the manner provi which is material to patentability as defined in 37 CFR 1.56 PCT international filing date of this application.	ubject matter of each of the claims of this appli ded by the first paragraph of 35 U.S.C. 112, I a	cation is not disclosed in the prior United cknowledge the duty to disclose information
U.S. Parent Application or PCT Parent Serial Number	Parent Filing Date (MM/DD/YYYY)	Parent Patent Number (if applicable)
PCT/US2003/034577	10/30/2003	
As a named inventor, I hereby appoint the registered patent agent(s) to prosecute the above-identified patent application States Patent and Trademark Office connected therewith. I Number may be amended from time to time. In the event the identified patent application and the invention(s) disclosed this Power of Attorney. Further, I hereby authorize the registion instructions from the Assignee(s) as to any action to application claiming priority thereto without direct communications.	n and any applications claiming priority thereto, acknowledge that the list of registered patent p nat I assign or am under an obligation to assign therein to another ("Assignee(s)"), I hereby ack stered patent practitioners associated with the fibe taken in the United States Patent and Tradeinication between the registered patent practition	, and to transact all business in the United ractitioners associated with the Customer my entire right, title and interest in the above-nowledge that I relinquish my right to revoke ollowing Customer Number to accept and mark Office regarding this application or any
CUS	TOMER NUMBER <u>051414</u>	

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Please direct all correspondence for the above-identified patent application to the address associated with the above Customer Number.

Given Nam	e (first a	ind middle (ii	fanyl)		Family Name or Surname						
Matteo	·		<b>7.1</b> /	Cherchi		-					
Inventor's Signature				I		Date					
Residence	City	Lecco	State	Country	Italy	<u> </u>	Citizenship	Italy			
Mailing Address	Via M	lentana 51/B	- <del>,1</del>					<u> </u>			
Mailing Address (In. 2)	City	Lecco	State	ZIP	23900	Coun	itry	Italy			

Declaration and Power of Attorney for Utility or Design Patent Application

Serial No. Not yet assigned
Atty. Docket No. MIT-170

Page 3 of 3

MERCHANT WANTER BOWN THAT

Name of Additional Join	nt Inven	tor, if any:							
Given Na	me (first	and middle [if	any])			Fa	mily Nan	ne or Surname	·
Michael R.					Watts				
Inventor's Signature		hA M	1		r	Date			17/2005
Residence	City	Hingham Hingham	State	MA	Country	U.S.	U.S. C		U.S.A.
Mailing Address	2 Eas	tgate Lane	<u> </u>	<u>.                                    </u>				ı	
Mailing Address (In. 2)	City	Hingham	State	MA	ZIP	02043	02043 Country		U.S.A.
Name of Additional Join	nt Inven	tor, if any:		•	•				-
Given Name (first and middle [if any])					]	Fan	nily Nam	e or Surname	
Hermann A.					Haus	-			
Signature of Eleanor L. Haus (Executor of the Estate of Hermann A. Haus)							Date		
Residence	City	Lexington	State	MA	Country	US		Citizenship	U.S.A
Mailing Address	3 Jeff	rey Street							•
Mailing Address (In. 2)	City	Lexington	State	MA	ZIP	02420	Cou	ntry	U.S.A.
Name of Additional Join	nt Inven	tor, if any:							
Given Nam	ne (first a	and middle [if a	ny])			Fan	nily Nam	e or Surname	
Inventor's Signature					<b>.</b>	•	Date		
Residence	City		State		Country			Citizenship	
Mailing Address		ı		1		<u></u>	· · · · · · · · · · · · · · · · · · ·		L
Mailing Address (In. 2)	City		State		ZIP		Cou	ntry	

VER 06/25/04

DECLARATION AND POWER	Attorney Docket No.	MIT-170			
OF ATTORNEY FOR UTILITY	First Named Inventor	Cherchi			
OR DESIGN	COMPLETE IF KNOWN				
PATENT APPLICATION	Application Serial Number	Not yet assigned			
Declaration	Filing Date	Herewith			
Submitted with	Group Art Unit	Not yet assigned			
Initial Filing	Examiner Name	Not yet assigned			

	<del> </del>							
As a below named inventor, I h	ereby declare that:							
My residence, mailing address, a	nd citizenship are as	stated below	next to my name.					
I believe I am the original, first a names are listed below) of the su							! ——	
AN INTEGRATE	D OPTIC POLARIZ	ZATION CO	NVERTER BASED	ON STRUCT	URAL CHII	RALITY		
the specification of which		(Title of	the Invention)				_	
was filed on  10/30/2003  as PCT International Application Number  PCT/US2003/034577								
I hereby state that I have reviewe any amendment specifically refer		e contents of	the above-identified	application, in	ncluding the	claims, as amende	ed by	
I acknowledge the duty to disclospatentability as defined in 37 CFI became available between the filipart application.	R 1.56, including for	continuation	n-in-part application	s, material info	ormation kno	wn by me which		
I hereby claim foreign priority be certificate(s), or 365(a) of any PC America, listed below and have a certificate(s), or of any PCT inter	T international appl lso identified below,	ication which	h designated at least the box, any foreign	one country on application f	ther than the or patent, or	United States of inventor's		
Prior Foreign Application Number(s)	Countr	у	Foreign Filing (MM/DD/YY		Priority t Claimed	Certified Co Attached? YES N		
Additional foreign appl	ication numbers are	listed on a si	upplemental priority	data sheet atta	ched hereto.			
I hereby claim the benefit under 3	55 U.S.C. 119(e) of a	any United S	tates provisional app	olication(s) list	ed below.			
Application Serial Numb	er(s)		te (MM/DD/YYYY	)				
60/422,414			10/30/2002 06/16/2003					
				,				

Declaration and Power of Attorney for Utility or Design Patent Application Serial No. Not yet assigned Atty. Docket No. MIT-170 Page 2 of 3

Declaration and Power of Attorney for Utility or Design Patent Application									
I hereby claim the benefit under 35 U.S.C. 120 of any United United States of America, listed below and, insofar as the sub States or PCT International application in the manner provide which is material to patentability as defined in 37 CFR 1.56 v PCT international filing date of this application.	bject matter of each of the claims of this applic ed by the first paragraph of 35 U.S.C. 112, I ac	ation is not disclosed in the prior United knowledge the duty to disclose information							
U.S. Parent Application or PCT Parent Serial Number	Parent Filing Date (MM/DD/YYYY)	Parent Patent Number (if applicable)							
PCT/US2003/034577	10/30/2003								
As a named inventor, I hereby appoint the registered patent p agent(s) to prosecute the above-identified patent application a States Patent and Trademark Office connected therewith. I as Number may be amended from time to time. In the event that identified patent application and the invention(s) disclosed the this Power of Attorney. Further, I hereby authorize the regist follow instructions from the Assignee(s) as to any action to be application claiming priority thereto without direct communications.	and any applications claiming priority thereto, cknowledge that the list of registered patent pract I assign or am under an obligation to assign referein to another ("Assignee(s)"), I hereby acknowled the practitioners associated with the force taken in the United States Patent and Tradem	and to transact all business in the United actitioners associated with the Customer my entire right, title and interest in the above-nowledge that I relinquish my right to revoke bllowing Customer Number to accept and mark Office regarding this application or any							

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Please direct all correspondence for the above-identified patent application to the address associated with the above Customer Number.

Name of Sole or First Inventor:				A petition has b	A petition has been filed for this unsigned inventor						
Given Nam	e (first a	nd middle	e [if any])		Family Name or Surname						
Matteo				Cherchi							
Inventor's Signature						Date					
Residence	City	Lecco	State	Country	Italy		Citizenship	Italy			
Mailing Address	Via M	entana 5	1/B	1				<b>L.</b>			
Mailing Address (ln. 2)	City	Lecco	State	ZIP	23900	Cour	ntry	Italy			
Additional inventors are r	named or	the next	page.								

20/533370

Declaration and Power of Attorney for Utility or Design Patent Application Serial No. Not yet assigned Atty. Docket No. MIT-170

Page 3 of 3

	Name of Additional Join	t Inven	tor, if any:								
	Given Nam	ne (first	and middle [if a	my])			Famil	y Nam	e or Sur	rname	
	Michael R.					Watts					
	Inventor's Signature							Date			
	Residence	City	Hingham	State	MA	Country	U.S.	1	Citizen	nship	U.S.A.
	Mailing Address	2 Eas	tgate Lane								<u>-</u>
	Mailing Address (ln. 2)	City	Hingham	State	MA	ZIP	02043	Cour	itry		U.S.A.
	Name of Additional Join	t Inven	tor, if any:								
	Given Name (first and middle [if any			ıy])			Family	/ Name	or Surr	name	·······
2 - 00	Hermann A.					Haus					•
	Signature of Eleanor L. Haus (Executor of the Estate of Hermann A. Haus)		Eleano	よ.	Haus	ر		Date apu	119,05	-	, , , , , , , , , , , , , , , , , , , ,
	Residence	City	Lexington	State	MA	Country	US		Citizen	nship	U.S.A
	Mailing Address	3 Jeff	rey Street			1	_ <b>L</b>				
	Mailing Address (ln. 2)	City	Lexington	State	MA	ZIP	02420	Cour	ntry		U.S.A.
	Name of Additional Join	t Inven	tor, if any:								
	Given Name	e (first a	ind middle [if ar	ıy])		,	Family	/ Name	or Surr	name	
	Inventor's Signature							Date			
	Residence	City		State		Country			Citizen	nship	
	Mailing Address				•	-				-	
	Mailing Address (In. 2)	City		State		ZIP		Cour	itry		

VER 06/25/04

# EXPRESS MAIL MAILING LACEL

**DECLARATION AND POWER** 

OF ATTORNEY FOR UTILITY

# NO. EV63098715545

Attorney Docket No.

First Named Inventor

MIT-170

Cherchi

OR DESIG	GN	COMPLETE IF KNOWN								
PATENT APPLI	CATION	Application	Serial Number	Not yet a	issigned					
Declaration		Filing Date		Herewith	1					
Submitted with		Group Art	Unit	Not yet a	ssigned					
Initial Filing		Examiner N	Name	Not yet a	ssigned					
		<u></u>	**** <u>-</u>							
As a below named inventor, I	hereby declare that:									
My residence, mailing address, and citizenship are as stated below next to my name.										
I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural										
names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:  AN INTEGRATED OPTIC POLARIZATION CONVERTER BASED ON STRUCTURAL CHIRALITY										
(Title of the Invention)										
the specification of which		(Tille O) in	e invention)			ø				
was filed on 10/30/2003 as PCT International PCT/US2003/034577										
was med on	Application Number									
I hereby state that I have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above.  I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known by me to be material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information known by me which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.  I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, or inventor's certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, or inventor's										
certificate(s), or of any PCT int Prior Foreign Application		-	Foreign Filing	g Date	Priority	Certified Copy				
Number(s)	Country	y 	(MM/DD/YY	(YY)	Not Claimed	Attached? YES NO				
		-								
Additional foreign ap  I hereby claim the benefit under		•				0.				
Application Serial Num			e (MM/DD/YYY)		is instead below.	<del></del>				
60/422,414		1	0/30/2002		]					
60/478,751		0	6/16/2003							

Declaration and Power of Attorney for Utility or Design Patent Application Serial No. Not yet assigned Atty. Docket No. MIT-170 Page 2 of 4

Declaration and Power of Attorney for Utility or Design Patent Application										
I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c), of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.										
U.S. Parent Application or PCT Parent Parent Filing Date Parent Patent Number  Serial Number (MM/DD/YYYY) (if applicable)										
PCT/US2003/034577	10/30/2003									
As a named inventor, I hereby appoint the registered patent practitioners associated with the following Customer Number as my/our attorney(s) and/or agent(s) to prosecute the above-identified patent application and any applications claiming priority thereto, and to transact all business in the United States Patent and Trademark Office connected therewith. I acknowledge that the list of registered patent practitioners associated with the Customer Number may be amended from time to time. In the event that I assign or am under an obligation to assign my entire right, title and interest in the above-identified patent application and the invention(s) disclosed therein to another ("Assignee(s)"), I hereby acknowledge that I relinquish my right to revoke this Power of Attorney. Further, I hereby authorize the registered patent practitioners associated with the following Customer Number to accept and follow instructions from the Assignee(s) as to any action to be taken in the United States Patent and Trademark Office regarding this application or any application claiming priority thereto without direct communication between the registered patent practitioner(s) and me.										
CUS	TOMER NUMBER 051414									
Please direct all correspondence for the above-identi- Number.	fied patent application to the address assoc	ciated with the above Customer								

· . . .

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name of Sole or First Inventor:					A petition has been filed for this unsigned inventor						
Given Nam	e (first aı	nd middle [if an	ıy])	·	Family Name or Surname						
Matteo					Cherchi						
Inventor's Signature	/	la li	4	<u>`</u>			Date	15/	104/2005		
Residence	City	Lecco TTX	State		Country	Italy		Citizenship	Italy		
Mailing Address	Via M	entana 51/B	- L								
Mailing Address (ln. 2)	City	Lecco	State		ZIP	23900	Cour	ntry	Italy		
Additional inventors are	named or	the next page.									

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Declaration and Power of Attorney for Utility or Design Patent Application Serial No. Not yet assigned Atty. Docket No. MIT-170 Page 3 of 3

Name of Additional Joint Inventor, if any:									
Given Nan	ne (first	and middle [if a	any])		Family Name or Surname				
Michael R.					Watts				
Inventor's Signature							Date		
Residence	City	Ḥingham	State	MA	Country	U.S.		Citizenship	U.S.A.
Mailing Address	2 East	2 Eastgate Lane							
Mailing Address (ln. 2)	City	Hingham	State	MA	ZIP	02043	Country		U.S.A.
Name of Additional Joint Inventor, if any:									
	e (first a	and middle [if a	.ny])			Family	y Name	e or Surname	
Hermann A.					Haus				
Signature of Eleanor L. Haus (Executor of the Estate of Hermann A. Haus)							Date		
Residence	City	Lexington	State	MA	Country	US		Citizenship	U.S.A
Mailing Address	3 Jeffi	3 Jeffrey Street							
Mailing Address (In. 2)	City	Lexington	State	MA	ZIP	02420	Country U.S.A.		U.S.A.
Name of Additional Joint Inventor, if any:									
Given Name	e (first a	and middle [if at	ny])			Family	/ Name	e or Surname	
						_	_		
Inventor's Signature	eventor's Signature				Date				
Residence	City		State		Country			Citizenship	
Mailing Address						. <del></del>	•	,	
Mailing Address (ln. 2)	City		State		ZIP	<del></del>	Coun	ıtry	

# EXPRESS MAIL MAILING LAUZI NO. EV63098715545

## INTERNATIONAL BUREAU OF WIPO **GENEVA, SWITZERLAND**

**APPLICANTS:** 

Massachusetts Institute of Technology

INTERNATIONAL SERIAL NO.:

PCT/US2003/034577

INTERNATIONAL FILING DATE: October 30, 2003

FOR:

AN INTEGRATED OPTIC POLARIZATION

CONVERTER BASED ON STRUCTURAL

**CHIRALITY** 

ATTORNEY DOCKET NO .:

MIT9921PCT

#### CERTIFICATE OF FACSIMILE TRANSMISSION/EXPRESS MAILING

I hereby certify that the attached correspondence is being sent via facsimile to the International Bureau of WIPO (011-41-22-740-1435) and that a confirmation of this facsimile will be deposited with certificate of Express Mailing (Label No. EL897782865US) with the United States Postal Service Express Mail Post Office to addressee: The International Bureau of WIPO; 34, chemin des Colombettes; 1211 Geneva 20, Switzerland.

The International Bureau of WIPO

34, chemin des Colombettes 1211 Geneva 20, Switzerland

### REVOCATION OF PRIOR POWERS & **POWER OF ATTORNEY BY APPLICANT**

As applicant of record of the above-identified application

#### REVOCATION OF PRIOR POWERS OF ATTORNEY

all powers of attorney previously given are hereby revoked and

# **NEW POWER OF ATTORNEY**

the following attorneys and/or agents are hereby appointed to prosecute and transact all business in all the competent International Authorities connected therewith.

F	micrimos comitocoa
Mark L. Beloborodov	Reg. No. 50,773
Robert S. Blasi	Reg. No. 50,389
John V. Forcier	Reg. No. 42,545
Steven J. Frank	Reg. No. 33,497
David J. Goldstone	Reg. No. 55,211
Duncan A. Greenhalgh	Reg. No. 38,678
William R. Haulbrook	Reg. No. 53,002
Ira Heffan	Reg. No. 41,059
Andrew L. Jagenow	Reg. No. 51,842
Douglas J. Kline	Reg. No. 35,574
William A. Meunier	Reg. No. 41,193
Christopher W. Stamos	Reg. No. 35,370
Natasha C. Us	Reg. No. 44,381
Daniel A. Wilson	Reg. No. 45,508

Customer Nº 051414

International Application No. PC. US2003/034577 Page of 3 of 3

All future correspondence should be sent to:

CLUSTOMER Nº 05/4/4

Goodwin Procter LLP Exchange Place Boston, MA 02109

Also, please change the attorney docket no. from MIT9921PCT to MIT-170PC.

Respectfully submitted,

Dated:

Name: Karin Rivard

Title: Assistant Director/Legal Counsel Massachusetts Institute of Technology

### INTERNATIONAL BUREAU OF WIPO GENEVA, SWITZERLAND

APPLICANTS:

Pirelli & C. S.p.A.

INTERNATIONAL SERIAL NO.:

PCT/US2003/034577

INTERNATIONAL FILING DATE: October 30, 2003

FOR:

AN INTEGRATED OPTIC POLARIZATION

CONVERTER BASED ON STRUCTURAL CHIRALITY

ATTORNEY DOCKET NO .:

MIT9921PCT

## CERTIFICATE OF FACSIMILE TRANSMISSION/EXPRESS MAILING

I hereby certify that the attached correspondence is being sent via facsimile to the International Bureau of WIPO (011-41-22-740-1435) and that a confirmation of this facsimile will be deposited with certificate of Express Mailing (Label No. EL897782843US) with the United States Postal Service Express Mail Post Office to addressee: The International Bureau of WIPO; 34, chemin des Colombettes; 1211 Geneva 20, Switzerland.

The International Bureau of WIPO

34, chemin des Colombettes 1211 Geneva 20, Switzerland

## **REVOCATION OF PRIOR POWERS & POWER OF ATTORNEY BY APPLICANT**

As applicant of the above-identified application

#### REVOCATION OF PRIOR POWERS OF ATTORNEY

all powers of attorney previously given are hereby revoked and

LIBC2379856

# **NEW POWER OF ATTORNEY**

the following attorneys and/or agents are hereby appointed to prosecute and transact all business in all the competent International Authorities connected therewith.

p	Titles colliceted (
Mark L. Beloborodov	Reg. No. 50,773-
Robert S. Blasi	Reg. No. 50,389
John V. Forcier	Reg. No. 42,545
Steven J. Frank	Reg. No. 33,497
David J. Goldstone	Reg. No. 55,211
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Christopher W. Stamos	Reg. No. 35,370
Natasha C. Us	Reg. No. 44,381
Daniel A. Wilson	Reg. No. 45,508

All future correspondence should be sent to:

Goodwin Procter LLP Exchange Place Boston, MA 02109

Also, please change the attorney docket no. from MIT9921PCT to MIT-170PC.

Respectfully submitted,

Dated: March 18, 2005

Name: Pier Giovanni GIANNESI

Title: Proxy Holder Pirelli & C. S.p.A.